## CLAIMS:

1. A compound of the formula (III)

$$\begin{array}{ccc}
R^4 \\
O & P \\
N-Q \\
R^2 R^3
\end{array}$$
(III)

in which:

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P is hydrogen or methyl;

Q is a labile amine- or amide-forming organic group that becomes removed in the human or animal body;

 $R^1$  is straight or branched  $C_2 - C_6$  alkyl,  $C_3 - C_6$  cycloalkyl or phenyl;

R<sup>2</sup> is hydrogen or methyl; and

R<sup>3</sup> is hydrogen, methyl or carboxyl; and

 $R^4$  is hydrogen or a labile ester-forming group selected from substituted and unsubstituted  $C_1 - C_6$  alkyl, benzyl and phenyl groups that become removed in the human or animal body,

or a pharmaceutically acceptable salt of any salt-forming compound within the above class,

but excluding compounds in which  $R_1$  is phenyl and  $R^2$ ,  $R^3$  and  $R^4$  are each hydrogen.

- 2. The compound of claim 1, in which R<sup>4</sup> is hydrogen.
- 3. The compound of claim 1, in which R<sup>4</sup> is other than hydrogen and is more labile than Q.
  - 4. The compound of claim 3, in which  $R^4$  is methyl or *t*-butyl.

- 5. The compound of claim 1, wherein Q can be removed hydrolytically under physiological conditions.
- 6. The compound of claim 1, wherein Q can be removed enzymatically under physiological conditions.
  - 7. The compound of claim 1, wherein Q is

$$\bigcap_{\mathsf{R}^5}$$
 ,  $\bigcap_{\mathsf{OR}^5}$  or  $\bigcap_{\mathsf{CO}_2\mathsf{R}^5}$ 

in which:

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 $R^5$  is hydrogen, straight or branched chain  $C_1$  –  $C_6$  alkyl, phenyl or benzyl in which the benzene ring may be substituted or unsubstituted; and

Y is hydrogen, straight or branched chain  $C_1 - C_6$  alkyl, or  $-CH_2CO_2R^6$  in which  $R^6$  represents straight or branched chain  $C_1 - C_6$  alkyl.

- 8. The compound of claim 7, wherein  $R^5$  represents t-butyl, benzyl or phenyl.
- 9. The compound of claim 1, wherein Q is selected from

$$0 \longrightarrow 0 \longrightarrow R^7, \quad X \longrightarrow NH_2, \quad X \longrightarrow NH_2 \quad \text{and} \quad X \longrightarrow R^7$$

in which:

 $R^7$  is hydrogen, straight or branched chain  $C_1 - C_6$  alkyl, phenyl or benzyl in which either or each benzene ring may be substituted or unsubstituted; and

X represents a phenyl group or any of the side chains of the 20 naturally encoded  $\alpha$ -amino acids.

10. The compound of claim 1, wherein Q is

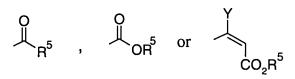
wherein  $R^7$  is methyl, t-butyl or phenyl.

5 11. A compound of the formula (IV)

$$S_{N-Q}^{R^4}$$
 (IV)  $S_{N-Q}^{R^4}$ 

in which P, Q and R<sup>4</sup> have the meanings given in claim 1, or a pharmaceutically acceptable salt of any salt-forming compound within the above class.

- 12. The compound of claim 11, in which R<sup>4</sup> is hydrogen.
- 15 13. The compound of claim 11, in which  $R^4$  is other than hydrogen and is more labile than Q.
  - 14. The compound of claim 13, in which  $R^4$  is methyl or *t*-butyl.
- 20 15. The compound of claim 11, wherein Q can be removed hydrolytically under physiological conditions.
  - 16. The compound of claim 11, wherein Q can be removed enzymatically under physiological conditions.
  - 17. The compound of claim 11, wherein Q is



in which:

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 $R^5$  is hydrogen, straight or branched chain  $C_1 - C_6$  alkyl, phenyl or benzyl in which the benzene ring may be substituted or unsubstituted; and

Y is hydrogen, straight or branched chain  $C_1 - C_6$  alkyl, or  $-CH_2CO_2R^6$  in which  $R^6$  represents straight or branched chain  $C_1 - C_6$  alkyl.

- 18. The compound of claim 17, wherein  $R^5$  represents t-butyl, benzyl or phenyl.
  - 19. The compound of claim 11, wherein Q is selected from

$$\bigcup_{0}^{0} \bigcup_{R^{7}, X}^{0} \bigcup_{X}^{H} \bigcup_{X}^{X} \bigcup_{NH_{2}, X}^{NH_{2}} \bigcup_{X}^{NH_{2}} \text{ and } \bigcup_{0}^{0} \bigcup_{R^{7}}^{0} \bigcup_{X}^{NH_{2}} \bigcup_{X}^$$

in which:

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 $R^7$  is hydrogen, straight or branched chain  $C_1 - C_6$  alkyl, phenyl or benzyl in which either or each benzene ring may be substituted or unsubstituted; and

X represents a phenyl group or any of the side chains of the 20 naturally encoded  $\alpha$ -amino acids.

20. The compound of claim 11, wherein Q is

wherein  $R^7$  is methyl, t-butyl or phenyl.

21. A compound selected from

- (S)-3-(Benzoylaminomethyl)-5-methylhexanoic acid;
- (S)-Benzyl 3-(acylaminomethyl)-5-methylhexanoate;
- (S)-3-[N-(acetoxymethyleneoxycarbonyl)aminomethyl]-5-methylhexanoic acid;
- (S)-3-[*N*-((2,2-dimethylpropionyloxy)methyleneoxycarbonyl)-aminomethyl]-5-methylhexanoic acid;
- (S)-3-[N-(benzoyloxymethyleneoxycarbonyl)aminomethyl]-5-methyl-hexanoic acid; and

pharmaceutically acceptable salts of any of the above.

22. A method for making a compound of the formula (III) or salt thereof, as

coupling a compound of the formula:

defined in claim 1, above, which comprises:

$$\begin{array}{cccc}
R^4 & & & P & & \\
O & N-H & & & (V) \\
R^1 & R^2 R^3 & & & & \end{array}$$

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in which P and  $R^1 - R^4$  have the meanings given in claim 1 and in which said compound is in the form of a free base or an ammonium salt with a compound of the formula

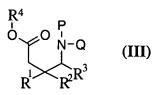
$$O_2N-\sqrt{\phantom{a}}-O-Q$$

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or QCl where Q has the meaning given in claim 1.

- 23. The method of claim 22, in which the compound (V) is a carboxylic acid and comprising the further step of esterifying the carboxyl group with a substituted or unsubstituted  $C_1 C_6$  alkanol, benzyl alcohol or phenol.
- 24. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of the formula (III)



in which:

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P is hydrogen or methyl;

Q is a labile amine- or amide-forming organic group that becomes removed in the human or animal body;

 $R^1$  is straight or branched  $C_2 - C_6$  alkyl,  $C_3 - C_6$  cycloalkyl or phenyl;

R<sup>2</sup> is hydrogen or methyl; and

R<sup>3</sup> is hydrogen, methyl or carboxyl; and

 $R^4$  is hydrogen or a labile ester-forming group selected from substituted and unsubstituted  $C_1$  –  $C_6$  alkyl, benzyl and phenyl groups that become removed in the human or animal body,

or a pharmaceutically acceptable salt of any salt-forming compound within the above class,

but excluding compounds in which  $R_1$  is phenyl and  $R^2$ ,  $R^3$  and  $R^4$  are each hydrogen.

- 25. A method for treating epilepsy comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.
  - 26. A method for treating faintness attacks, hypokinesia and cranial disorders comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.
  - 27. A method for treating a neurodegenerative disorder comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

- 28. A method for treating depression comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.
- 29. A method for treating anxiety comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.
- 10 30. A method for treating panic comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.
- 31. A method for treating pain comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.
  - 32. A method for treating a neuropathological disorder comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.
  - 33. A method for treating digestive disorder comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

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